

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Stéphanie V. Desrousseaux et al

A METHOD FOR PREPARING A
HYBRID ALUMINOSILICATE
POLYMER AND THE POLYMER
RESULTING FROM THIS METHOD

Serial No. 10/521,899

Filed 14 January 2005

Commissioner for Patents
P.O. Box 1450
Alexandria, VA. 22313-1450

Group Art Unit: 1793

Examiner: Matthew E. Hoban

Sir:

DECLARATION UNDER RULE 132

The undersigned, Stéphanie Véronique Desrousseaux of
Cambridge, United Kingdom, declares that:

Her education includes a Ph.D in Organic Chemistry from
Bordeaux University, France, for the design and synthesis of molecules and
materials for non-linear optics applications.

She joined Kodak Industrie in France in 2000 as a Research
Scientist to work on projects related to the design and synthesis of inorganic
materials for developing ink-receiving media with improved image quality and
stability.

Since 2006 she has been working as a Senior Research Scientist in the
Kodak European Research Laboratories of Kodak Ltd. in Cambridge on projects
related to the design and synthesis of polymeric additives for developing ink
formulations for continuous inkjet applications.

She is co-inventor of the above-captioned patent application, along with Dr. Olivier J. Poncelet, a former co-worker at the Research Laboratories in Kodak Industrie from 2000 to 2005.

She has reviewed the outstanding Office Actions on the above-captioned application in which the Examiner contends that the invention as claimed in claims 1-8 and 10-23 of the above-captioned application is unpatentable over US 6,468,492, hereinafter '646, of which Poncelet is the sole inventor.

The Examiner contends that the preparation via the route described in the above-captioned application and that described in '646 'produces the same product with no unexpected result made of record', whilst acknowledging that claim 24 'discloses a specific material with a specific Raman spectrographic characterization' and hence defines patentable subject matter.

She submits that there is a major difference between the method of the above-captioned application and '646, namely in step b) in each case, resulting in the formation of two quite different materials, having very distinct structures and properties.

In the method of '646, a *heating* treatment 'below 100°C' is required to grow the material in the shape of a crystalline, tubular, filamentary, aluminosilicate polymer (as observed by Transmission Electronic Microscopy, on electronic diffraction patterns and by the presence of sharp bands on Raman spectra), the filaments being grown by the energy brought to the system. The structure of the aluminosilicate produced by this method is also already disclosed on page 1 of the above-captioned application, where '646 is referred to by its EP equivalent, EP-A-1 112 959.

According to '646, the heating step is, in fact, performed at 96-98 °C for 24 hours and she can confirm that the crystalline, filamentous material would not be produced if the temperature were significantly lower. Thus the crystalline product of '646 would not be obtained at a temperature as low as 35 °C, i.e. the top end of the range claimed in the above-captioned application, even if subjected to an extremely long treatment time.

In the above-captioned application, amended claim 1 requires that, after stirring the mixture in step (b) at ambient temperature, elimination of the by-products occurs *directly* thereafter, such that there can be *no* heating step. A heating step would prevent the formation of the amorphous isotropic aluminosilicate polymer (as observed by Transmission Electronic Microscopy, on electronic diffraction patterns and by the presence of broad bands on Raman spectra) as claimed in the above-captioned application, which requires therefore that the material be maintained at ambient temperature, namely 15 °C to 35 °C, i.e. with no heating, until the amorphous material is formed.

Whilst being appreciative of the examiner's recognition that the material as defined by the specific Raman spectra as in claim 24 is not disclosed in the prior art, she submits therefore that the invention as defined in claims 1-8 and 10-23 should also be acknowledged as patentably distinct from the invention of '646.

In addition to the formation of a different material with different chemical and physical properties, the lack of a heating step as in the above-captioned application, brings an economic advantage over the material prepared according to '646.

The undersigned declares further that all statements made herein of the undersigned's own knowledge are true and all statements made on information and belief are believed to be true. These statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



Stéphanie V. Desrousseaux

Date: 2nd July 2008